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Learning in Inclusive Education
Research:Re-Mediating Theory and
Methods with a Transformative Agenda

by Alfredo J. Artiles
Elizabeth B. Kozleski
Sherman Dorn
Carol Christensen

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Learning in Inclusive Education Research:
Re-Mediating Theory and Methods with a Transformative Agenda

Alfredo J. Artiles

Arizona State University

Elizabeth B. Kozleski

Arizona State University

Sherman Dorn

University of South Florida

Carol Christensen

University of Queensland

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Abstract

In theory, inclusive education is about *all* students and focuses on student presence, participation, acceptance, and achievement. In practice, inclusive education is multiplicity of discourses and practices. Historically, inclusive education is situated within waves of evolution. The first wave saw the establishment of general rights for children with disabilities, but some children—especially those with behavioral problems and severe intellectual disabilities—remained unrecognized outsiders in schools and school communities. Subsequent waves of inclusive education have had differential impacts in developed and developing countries.

A review of primarily U.S. and British inclusive education research at the school and classroom levels identified four shortcomings: inclusive education theory has outpaced its practice; inclusive education research ignores the influences of globalization forces; inclusive education theorization lacks conceptual clarity; and a substantial gap between the views of learning that informs research conducted either at the classroom level or the school level. In addition, views of learning in classroom and school based studies rely on different theoretical stipulations. Lack of cross-fertilization between classroom- and school-based inclusive education research is a missed opportunity for enriching this emerging knowledge base. Recommended is a re-mediation in the relationship between researchers and their work with theories that offer a systematic understanding of the cultural and political nature of learning.

Learning in Inclusive Education Research:

Re-Mediating Theory and Methods with a Transformative Agenda

Inclusive education is a highly visible yet contentious notion in contemporary education reform due to conceptual, historical, and pragmatic reasons. From a conceptual perspective, the definition of inclusion is still debated, ranging from physical placement in general education classrooms to the transformation of entire educational systems. However, inclusive education tends to be defined in many professional and popular contexts as merely the placement of a student with disabilities in mainstream programs alongside nondisabled individuals. But even when inclusion is defined in such simplistic terms, the evidence suggests *where* a student with disabilities is educated has important correlates. For instance, a study of 11,000 students in the U.S. shows that students with disabilities who spend more time in general education classrooms tend to be absent less, perform closer to grade level than their peers in pull-out settings, and have higher achievement test scores (Blackorby et al., 2005). On the other hand, in the same study students with disabilities generally perform more poorly than their same grade peers without disabilities. In particular, unlike students with learning and sensory disabilities, students with mental retardation and autism cluster around the low end of standardized achievement tests. While some differences in outcomes were found between students with various kinds of disabilities, overall the study seemed to confirm that students with disabilities in general education settings were able to outperform academically their peers in separate settings when standards-based assessments were used.

This finding is corroborated by the second National Longitudinal Transition Study (NLTS-2) which found that secondary students with disabilities who take more general education classes have lower grade point averages than their peers in pull-out academic settings, but they

score closer to grade level on standards-based assessments of learning than their peers in math and science, even when disability classification is taken into consideration (Wagner et al., 2003).

From a historical perspective, special education was created as a parallel education system to serve students with disabilities. The construction of a separate system created many dilemmas related to allocation of resources, divisions of professional labor, professional identity issues in personnel preparation, and barriers for the education of disabled populations in terms of access to mainstream practices and contexts. Inclusive education aims to change this historical separation, but it is not surprising that it is more visible in the special education literature, even though it purportedly addresses the needs of *all* students.

Moreover, the student populations historically served in special education have been predominately poor, racial minority students. However, the advent of globalization is changing the characteristics and experiences of the student population and the climate in which educators serve these students. For example, teachers are working in educational systems where accountability and standards are increasingly more stringent with the goal of preparing a workforce that can compete globally. These pressures are creating significant tensions for teachers and administrators as they are also being asked to respond to equity questions related to inclusive education. Meanwhile, U.S. racial minority students living in urban communities are increasingly being educated alongside immigrant students whose language and cultures differ markedly from the public educational system ethos. Due to the changes and demands brought about by globalization, students are growing accustomed to cross cultural borders along spatial and historical scales. A major consequence is that (student, teacher, school, community) cultures are being hybridized at a rapid pace precisely at a time when accountability reforms are pushing educational systems to homogenize its “client base.”

Pragmatically, these conceptual and historical patterns raise many complex questions about the ways in which practitioners construct and sustain inclusive practices. For instance, given the trends outlined above, what are the governance structures, professional development models, curriculum approaches, and collaborative processes that support positive learning outcomes for all students? Are researchers asking programmatic questions and do study designs rely on multiple methods? More importantly, how do we know these efforts are having a positive impact on student and professional learning? Is learning in this research defined from single or multiple theoretical perspectives? Although we do not expect to obtain simple answers to these multifaceted questions, we must take stock of the findings from the emergent empirical knowledge base on inclusive education.

The purpose of this review is to examine the evidence on inclusive education, with particular attention to the views of learning that inform this work. Our first challenge was to work with a clear understanding of what counts as a learning theory. We found the work of Lave (1996) and Bransford, Brown, and Cocking (2000) useful to address this question. Lave (1996) explained a theory of learning embodies three types of stipulations: a *telos*—“that is, a direction of movement or change of learning (not the same as goal directed activity),” a *subject-world relation*—“a general specification of relations between subjects and the social world (not necessarily to be construed as learners and things to-be-learned),” and *learning mechanisms* (“ways by which learning comes about”) (Lave, 1996, p. 156).

Lave (1996) explained that the focus on *telos* compels researchers to examine how learners change over time. From a practice-based view of learning, this means to document the trajectories of becoming kinds of persons. Subject-world relation is traditionally addressed by asking where reality lies (in the subject or in the world?) and how a person comes to know it

(which is contingent on where it lies). She proposed, in contrast, that a practice based model sees subject-world relations concerned with the following question: “How is the objective world socially constituted, as human beings are socially produced, in practice?” (p. 156). Lave described learning mechanisms in most learning theories as concerned with techniques, strategies, and tools. A practice based learning model focuses instead on participation—i.e., “ways of becoming a participant, ways of participating, and ways in which participants and practices change” (p. 157). In turn, Bransford et al. (2000) distinguished among learning approaches that are community-, assessment-, learner-, and subject-centered.

We use some of these constructs when relevant as we review the research on inclusive education and in the final discussion of the article. Rather than an exhaustive scrutiny of studies on the topic, we analyze two broad strands of inclusion research grounded in distinct units of analysis, namely whole-school and classroom-based research. We cite studies selectively within each research strand to highlight broad trends and patterns in this body of work. First, however, we define inclusive education and outline various discursive strands in this work. Next, we summarize the historical trajectory of inclusive education and analyze the two programs of inclusion research. We conclude with reflections about theory and research methods for future inclusive education work.

Inclusive education defined: Discourses, assumptions, and intersections

Inclusive education is an ambitious and far-reaching notion that is, theoretically, concerned with *all* students. The concept focuses on the transformation of school cultures to (a) increase *access* (or presence) of all students (not only marginalized or vulnerable groups), (b) enhance the school personnel’s and students’ *acceptance* of all students, (c) maximize student *participation* in various domains of activity, and (d) increase the *achievement* of all students

(Booth, Ainscow, Black-Hawkins, Vaughan, & Shaw, 2000; Kalambouka, Farrell, Dyson, & Kaplan, 2005). Yet, inclusive education is rooted in conceptions of inclusion, the movement of students in special education, particularly those with severe disabilities, from separate and isolated facilities and classrooms, into neighborhood schools and general education classrooms. Indeed, systematic searches of the literature consistently suggest research on inclusive education tends to focus on the *inclusion* of certain vulnerable groups, particularly students with special education needs and disabilities.

Linkages between special and inclusive education are particularly strong in wealthy, industrialized countries that began to create policies and programs in the 1970s to serve the educational needs of students with disabilities. Because the concept of specialized education was instantiated in policy and bureaucratized in practice, evolving concepts of practices were constructed in response to existing programs. The 1994 Salamaca Statement endorsing inclusion as an important value in special education—“those with special educational needs must have access to regular schools which should accommodate them within a child-centered pedagogy capable of meeting these needs” (UNESCO, 1994, p. viii)—came while many developing countries had (and many continue to have) weak systems of education in general and particularly for their students with disabilities. This historic coupling of inclusive and special education, particularly in countries that adopted special education policies and systems prior to 1980 may produce the kinds of disconnects between the theory and its practice made visible in current research synthesis such as that by Dyson, Howes and Roberts (2002).

Dyson et al. (2002) intended to conduct a comprehensive and systematic review of research on school-level actions for promoting participation by all students. Although they designed the review to examine research in schools that had taken a holistic approach to

inclusion (i.e., a focus on *all* students, emphasis on multiple forms of participation), they found that most “studies reported population composition in outline, but presented detailed data only on one or a limited number of distinct student groups and on how schools were responding to these groups ... the majority of studies included a focus on students with special educational needs and disabilities” (p. 27). Similar trends have been reported elsewhere (Kalambouka et al., 2005).

Dyson (1999) identified multiple professional discourses about inclusive education that are grouped under two broad categories, namely discourses to *justify* the need for inclusive education and discourses on the *implementation* of inclusion. One set of arguments to *justify* inclusion rests on a *rights and ethics* perspective—i.e., individuals with disabilities ought to be educated in inclusive programs because it is their inalienable right. In addition, the justification of inclusive education can be based on an *efficacy* critique. Accordingly, inclusive education is needed because segregated/separate special education programs have not shown a positive impact on students with disabilities. Many of these studies documented informants’ (e.g., teachers, students) views on the need, support for, and feasibility of inclusive education programs (Artiles, 2003). Many of these studies relied on survey instruments and rendered mixed results.

In contrast, the *implementation* of inclusive education discourse is supported by arguments that stress *political* struggles. The thesis is that the change from a traditional separate special education system to an inclusive system cannot take place without political labor and disputes. A second implementation discourse addresses *pragmatic* considerations that explore the question “how does it work?” The pragmatic discourse on inclusive education focuses on the nature and characteristics of programs and schools (Dyson, 1999). This scholarship is perhaps the most voluminous and includes descriptions of the philosophical foundations of these

programs, various (governance, curricular, and pedagogical) practices, climate of school, and professional learning opportunities. Additional research addresses the perspectives (e.g., beliefs, perceptions) of students, parents, teachers, and administrators about inclusive education programs. Another set of research on inclusive education focuses on its achievement outcomes for students with and without disabilities.

Although the term inclusive education might suggest a straightforward definition, in practice the construct has multiple meanings that range from physical integration in general education classrooms (e.g., Magiera & Zigmond, 2005) to the transformation of school buildings (e.g., Bulgren & Schumaker, 2006), and even the reconfiguration of entire educational systems (e.g., Ferguson, Kozleski, & Smith, 2003). Despite these multiple meanings, it is fair to argue that the telos (i.e., “a direction of movement or change of learning” Lave, 1996, p. 156) of the inclusive education movement has been to give access to and enhance the participation of individuals with disabilities in normative contexts and practices (i.e., nondisabled cultures) despite efforts to broaden the construct and definition. So, tensions between the theory of inclusive education and its practice remain. Inclusive education is theorized as a broad, boundary blurring agenda across multiple perspectives that enrich learning such as culture, language, migration, experience, ability, and religion for *ALL* students. This perspective is juxtaposed with a pragmatic concern about where and how students with disabilities will be educated. A historical perspective helps to explain how these tensions remain.

A historical map of inclusive education

Detailing the history of inclusive education rhetoric, policies, and practices is more difficult than identifying patterns of special education history. Putnam (1979) suggested that the development of special education was largely determined by a country’s wealth. An empirically

tested, international, historical map of inclusion does not exist. However, for heuristic purposes one can divide countries' special education services by two questions: had their systems developed into mature infrastructures by the early 1980s, and by then had political, legal, or administrative pressures challenged school systems to move towards more inclusion?

In the 1960s and 1970s, pressures for inclusion affected school systems in several industrialized countries (e.g., Denmark, France, the U.S., and the United Kingdom) that had long-established special education systems (much of it separate from general education) (Braswell, 1999; Sander & Hausotter, 1999; Woll, 1999). For some countries, such as Italy, there is some disagreement about the extent of policy support for inclusion since the 1970s (e.g., Cocchi, Larocca, & Crivelli, 1999; Meijer, Pijl, & Hegarty, 1994). For other countries with mature systems, the earlier wave of inclusion left them unaffected: The Netherlands, Hungary, the former Soviet Union, Brazil, Hong Kong, Taiwan, and Japan are notable in this group (Abe, 1998; Csányi, 2001; Eglér Mantoan & Valente, 1998; Shipitsina & Wallenberg, 1999). Among some countries, totalitarian or otherwise politically-restricted regimes either interfered with the development of special education or encouraged the development of largely separate systems in China, Mexico, Nigeria, Spain, South Africa, and the Palestinian territories (Arrendondo & Ryan-Addedondo, 1999; Deng, Poong-McBrayer, & Farnsworth, 2001). Certainly, one could also place Brazil and the Soviet Union in this category as well, historically. But even apart from the effects of dictatorship, poverty remained a significant barrier to the development of systems in these countries as well as in others such as India and Pakistan (Khan, 1998; Misra, 1999).

A second wave of inclusion instituted by some countries, followed by the signing of the Salamanca Statement by 92 nations should be understood as evidence of the multiple pressures producing inclusive education responses. For instance, some countries who signed the

Salamanca Statement are engaging in debates over inclusion similar to the one contested in the United States. One example is South Africa, whose new constitution and a new education law in 1996 enshrined broad rights, but where the result was a debate over the continuum of services (Gwalla-Ogisi et al., 1998). Second, in undeveloped systems, students with disabilities may be in general education classrooms but without the kinds of services and supports needed to access the curricula and hence, learning. To characterize this as inclusion may be a misnomer. Third, in many of the second-wave inclusion countries, the society or educators have resisted inclusion efforts to some degree. In particular, Nutbrough and Clough's (1994) identification of a "yes-but" response—yes in principle, but not always in individual cases—is very similar to reactions identified in the Western-focused literature review of Scruggs and Mastropieri (1996).

Of Boundaries and Margins

There are many reasons why those outside special education should pay attention to special education's practices and history. All teachers are responsible at some point for the education of students with disabilities. In addition, in many countries students with disabilities have specific rights. Third, school system behavior is tied to what happens at the margins of the system. Not only is the education of students with disabilities more expensive on average than that of other students, but the debate over inclusion has set the boundaries of who *belongs* in school communities (Cobb-Roberts, Dorn, & Shircliffe, 2005). The structure of U.S. special education law is an established fact of educational politics with robust constituencies. The tacit agreement is as important as the continuing conflict for delineating who belong to schools for most Americans and who are still excluded from that understanding of a school community.

The result of the U.S. legislative and legal battles in the 1970s was a political and legal compromise. The general rights of children with disabilities were established legally. But the

1982 U.S. Supreme Court decision limited the substantive educational obligations of school districts to providing programs that were likely to provide some benefits to children (*Board of Education v. Rowley*, 1982; Weatherley & Lipsky, 1977). And educators discovered that the majority of students with disabilities had tolerable cognitive and behavioral problems at worst (e.g., Scruggs & Mastropieri, 1996). But some children—especially those with severe intellectual disabilities and behavioral problems—have remained the focus of battles over inclusion, *not* commonly recognized as valuable (or even legitimate) members of schools. After the Supreme Court limited suspensions for students with disabilities—defining suspension of more than 10 days as a change in placement that triggered due-process protections and thus setting a practical limit to suspensions without parent approval—educators both resisted and then openly fought those rules.

In the 1990s, school officials convinced U.S. Congress to modify the limits on disciplining students with disabilities. One myth that spread in the late 1980s and early 1990s was that schools *could not* legally discipline students with disabilities, both because of the Supreme Court's interpretation of federal law and also because of the threats that parents would sue the local schools. This myth was incorrect—federal law left schools with several options apart from suspension, and schools had several ways to separate students with disabilities from school—but it provided fodder for educators, parents, and eventually lawmakers who thought that federal special education law established double standards for behavior (e.g., Alpert, 1996). In the early 1990s, the U.S. Congress explicitly included students with disabilities when it gave local schools the authority (and mandate) to suspend and move children who brought guns and other weapons to school. In 1997, the reauthorization of federal special education law created a new compromise. One part of the compromise was authority given school officials to provide an

alternative 45-day placement for children who had behaved in ways dangerous to other students, teachers, or staff. The other part of the *de facto* compromise was the requirement that students' annual programs have support for positive behavior where appropriate. Even with a compromise, the battle over discipline in the 1990s clearly marked the boundaries of "easily-accommodated" students—those who had behavior problems were not necessarily welcome in the general classrooms of local public schools. While U.S. educators and communities now acknowledge that the "borders" of the school community include the majority of children with disabilities, they still patrol the borders for students who transgress the rules (Yell, Rozalski, & Drasgow, 2001).

Institutions and Normative Expectations

The institutional focus on the margins—students with behavior problems and debates over full inclusion—have come with both practical and symbolic arguments. Debates over behavior and placement revolve both around pragmatic questions. The simultaneous existence of practical and values questions illustrate the linkage of institutional settings and normative expectations. The practices of institutions can both establish and violate norms, and well-established practices frame future debate, creating a legacy for how one discusses the issue. Inclusion in particular split the special education community. When signed in 1975, Public Law 94-142 provided an ambiguous mandate: Students must be in the "least restrictive environment," with as much contact with nondisabled peers as was consistent with an appropriate education. There has been some controversy about the appropriate extent of *mainstreaming* students (the term used prior to the advent of inclusive education), but little among advocates for special education rights. In the early 1970s, the primary concerns were basic: access to school for those who had been excluded before, fair assessment, the inclusion of parents in individualized educational planning, and due-process protections. This focus on access has occurred in dozens

of other countries as well. While the statistics from the 1960s and early 1970s are sketchy, parents and advocates observed that hundreds of thousands of students with sensory impairments and mild cognitive disabilities were unnecessarily separated from nondisabled peers in self-contained classes and that tens of thousands of students with more involved cognitive disabilities were in separate schools with no possibility of contact with nondisabled peers. While there was resistance from some educators, most advocates were firmly convinced that the vast majority of students with disabilities needed and had a right to more contact with nondisabled peers (20 U.S. Code §1412(5)(B); Sarason & Doris, 1979; Sigmon, 1983).

By the early 1990s, in contrast, the majority of students receiving special education services *did* have meaningful, frequent contact with nondisabled peers in school (U.S. Office of Special Education and Rehabilitative Services (OSERS), 2002). Public Law 94-142 had significantly changed *where* students spent their time in school, in part through its continuum of placement options, from full-time placement in a general-education classroom without any help to residential institutionalization, and within 15 years the vast majority of students were concentrated much closer to the nonrestrictive end of the continuum than in 1975. By the 1990s, students with disabilities were far more likely to spend the school day in ordinary school buildings than in separate settings; for all students aged 6-17 receiving special-education services in 1990-91, 69% spent at least 40% of their time in the general-education setting, with nondisabled peers (U.S. OSERS, 2002). That fact did not mean that most students with disabilities spent all of their time with nondisabled peers or that they were succeeding academically in a general classroom setting. A plurality received services in resource rooms and other part-time settings where special-education teachers have juggled responsibilities for groups of students who shuttle in and out for pull out academic instruction during the day. Other

students had very limited social contact with nondisabled peers, outside academic instruction—a more common routine for interaction between nondisabled peers and students with more severe intellectual disabilities. Among all 6-21 year olds labeled mentally retarded in 1990-91, 58% spent 60% or more of their time in a separate classroom, and another 12% were outside regular schools entirely. Yet other students with disabilities spent academic instructional time in general education classrooms with little support (U.S. OSERS, 2002).

This dramatic change in the placement patterns of special education helped ignite additional debate about moving students more systematically into general-education settings—what educators and parents began to call inclusion in the 1980s. Having some success in changing where schools placed students, some advocates pushed for more inclusion (Osgood, 2005). Beginning in the late 1980s, some parents, researchers, students, educators, and advocates for children with the most severe intellectual disabilities argued that *any* separation from a general education classroom was inappropriate, and they began to argue for the full inclusion of all students with disabilities in classrooms with nondisabled peers (e.g., Lipsky & Gartner, 1996; Stainback & Stainback, 1996).

Very quickly, other parents, researchers, students, educators, and advocates *within special education* argued against full inclusion and against some other inclusion proposals. Some called themselves preservationists (seeking to maintain the continuum of placement options). Much of the split came between different areas of special education. The most visible advocates of full inclusion were tied to the education of individuals with severe intellectual disabilities, an area that was still on the margins of many schools more than a decade after Public Law 94-142. Curriculum for students with severe intellectual disabilities stressed learning the social and survival skills necessary for adulthood. On the other hand, many of the most visible opponents of

full inclusion were tied to the education of individuals with relatively mild cognitive disabilities, whose most urgent concerns were effective academic instruction, not social contact with nondisabled peers. Parents, students, researchers, educators, and advocates closely tied to other areas of special education had their own particular concerns that they used to judge inclusion proposals. Some concerns focused on whether most general classroom teachers had skills or time to reward good behavior. Other concerns focused on how full inclusion (or something close to it) might endanger the ties between students with hearing impairments and the Deaf community that many adults with hearing impairments identified with (e.g., Fuchs & Fuchs, 1994; Gallagher, 2001; MacMillan, Gresham, & Forness, 1996; Zigmond et al., 1995).

Legally and politically in the 1990s, full inclusion advocates faced an uphill struggle. Legally, the ambiguous wording of the least restrictive environment mandate did not clearly require full inclusion. Despite claims to the contrary, full inclusion advocates were unable to convince judges that the law required full inclusion. Where a school system followed due process guidelines and provided documentation of decision-making, courts have generally accepted the professional judgment of educators about a variety of discretionary matters in special education, including the appropriate placement for students with disabilities (Yell & Drasgow, 1999). Politically, full-inclusion advocates have faced the opposition of many educators and some parents of students with disabilities. Part of the opposition of administrators has been concern with the practical problems of full inclusion—most especially, the potential for students whose proper curriculum was not academic in focus to distract from the academic education of other students.

But the vigorous nature of the debates over full inclusion in the 1980s and 1990s—for example, AFT President AL Shanker's (1994-95) vociferous argument against full inclusion—is

not well-explained by the practical discourse. It is better explained in some ways by several issues that are tied to symbolism and values. Part of the sometimes-bitter nature of the debate may well be related to a residual exclusion of students with severe intellectual disabilities from educators' notion of a school community. Part may be tied to the evolution of special education as a community with common interests...and, since 1975, somewhat diverging sets of interests. And part may be related to cooling support for integration as a value of public schooling. In all of these ways, the organization of schools became a lens through which advocates with different perspectives viewed appropriate norms.

The Pull and Limits of Standardization

The existence of institutionalized norms has a complex relationship with efforts to individualize or standardize educational programs and practices. On the one hand, efforts to individualize education have run into bureaucratic practices. Several countries have experimented with individualization both as a best-practice standard for special education and also as an affirmation of values or rights for students with disabilities. In the U.S., the legal right to individualization is operationalized as the individualized education plan. In many countries, the values are expressed in language norms, such as the effort to push for *person-first* language (e.g., students with disabilities instead of disabled students). But in each case, there are limits to the efforts to individualize education either programmatically or in language. As Smith (1991) pointed out, the drafting of individualized plans in the U.S. all too often became a routinized, bureaucratic process that endorsed existing practices. Tomlinson (1982) illustrated how British schools adopted Warnock's "special needs" phrase but without the "*student with special needs*" emphasis on the student rather than a deficit. The limits to individualization in the past few decades may be a function of school bureaucracies of a long history of routines that are budged,

modified, and appended but rarely torn apart (e.g., Tyack & Cuban, 1995). So while coeducation developed informally and without significant debate in the loose, unsystematic set of early 19th century North American primary schools (Tyack & Hansot, 1990), the expansion of schooling for students with disabilities in the past half-century occurred in a bureaucratized environment. Special education itself could be considered a dramatic success of a system that accepts additions but not revolutions (Cuban, 1996).

Yet that historical development of standardization is incomplete. Schools are highly standardized in formal rules, in textbook purchases, and in some matters of record keeping, but they are highly nonstandardized in everything humans have day-to-day authority over— instructional methods, classroom management, and the handling of human crises that inevitably occur in a building with several hundred or thousand students. Organizational theorists call this a *loosely coupled system* (Weick, 1976) or *street-level bureaucracy* (Weatherley & Lipsky, 1977), but it is the inevitable result of attempting to systematize an activity that is personal in nature and where the vast majority of costs are in personnel. Thus, the great problem of innovative techniques is “scaling up” (Healey & De Stefano, 1997), school systems drop easy-to-use programs with demonstrated success (Fuchs, 1990), and Florida primary teachers under a mandate to take data for formative assessment frequently misunderstand its purpose and use (K. Powell, personal communication).

An alternative interpretation of these limits to individualization focuses on the neo-liberal push for efficiency. Individualized education was a key element of initial legislative reforms through the Individualized Education Programming mandate and fit well both with egalitarian and social-mobility goals for education. In other words, advocates for greater access and inclusion argued that to benefit from education and to have equality of opportunity, students with

disabilities needed to have their specific needs addressed. However, individual provision undermines some aspect of neo-liberal agendas that threaten to dominate a globalized economy, an efficiency view increasingly used to justify education reforms as rationalization.

Individualization is more expensive, and it is unstandardized by definition. But such tensions have been largely submerged in the existing literature on inclusion. A focus on implementation and techniques, or the practical discourse, can appeal and in the past has appealed both to those interested in egalitarianism and social mobility as well as those interested in efficiency.

The Globalization Context

While this is not the first era in history with a global interchange of ideas, goods and services, people, and even diseases, the most recent wave of globalization has pushed economic, political, and social relations in a new direction. We use the term globalization here to refer to the transformations in social, economic, political, and governance structures that have occurred across the globe in the last two decades. These changes have had a dramatic and pervasive impact on the societies in which they have occurred.

Rizvi, Engel, Nandyala, Ruthowski and Sparks (2005) argue that globalized societies are characterized by mobility of capital, information and communication technologies as well as mobility of people, culture and systems of management. This rapid movement across nations and societies is underpinned by belief in free and open markets, and policies of competition. Thus, there has been an 'inexorable integration of markets, nation-states, and technologies to a degree never witnessed before in a way that is enabling individuals, corporations and nation-states to reach round the world faster, deeper, and cheaper than ever before' (Friedman, 2000, p. 7). In brief, neo-liberalism promotes (a) minimal regulation and withdrawal of state from intervention in the economy, (b) withdrawal of the state from social intervention and the privatization of

social support to citizens, (c) deregulation of labor markets, rejection of labor policies such as minimum wage and collective bargaining, (d) emphasis on economic efficiency, productivity and profitability, (e) emphasis on public accountability, (f) openness of competition, and (g) free flow of global capital, labor and resources among many other features (Rizvi et al., 2005; Strange, 1996; Castells, 1996).

These two concepts, globalization and neo-liberalism have immediate relevancy for constructing and sustaining inclusive education agendas within nations. First, globalized populations mean that schools must prepare for new students who may detach their identities from particular times, places, and traditions. Many transnational students today are staying in ever closer contact with their home nations, thus preserving cultural practices, creating hybrid national identities, and cultivating a steady flow of economic and cultural exchanges across nations (Garcia Canclini, 1995). Accessible mass communication means that events at home countries and in the host society continuously affect the daily routines of students and the communities in which they participate (Artiles & Dyson, 2005; Suárez-Orozco, 2001).

Second, neo-liberalism means that governments have new interests in schooling both in how investments are made in schooling infrastructures and the results that are achieved. While Labaree (1997) argued that social mobility (and consumerism) once dominated much of the U.S. education system, the ideology of neo-liberalism emphasizes social efficiency. The social efficiency view suggests that education plays a fundamental role in the production of capable workers to contribute to the economic health of the nation and the corporations that employ them. The social efficiency view also requires that educational systems work efficiently. They must produce workers who have the knowledge and skills to contribute to the knowledge economy. Additionally, they need to have efficient organizational structures, so that there is an

economic return on society's investment. The social efficiency view sees education as both a public good and private benefit because it enhances the individual's ability to compete effectively within the labor market. In both cases, education is linked to organizational efficiency, and economic productivity (Rizvi et al., 2005). Thus, globalized economies have pursued an agenda that redefines the purposes of education to focus on developing the capacity of productive workers that have a strong grounding in basic skills of literacy and numeracy, are flexible and creative, multi-skilled and competent in information and communication technologies.

In globalized societies, social efficiency has been endorsed by intergovernmental organizations, large corporations, and individual citizens, as well as increasing numbers of national governments. The emerging market-driven educational paradigm has important implications for students considered outliers in a homogenizing system such as students with disabilities. Unfortunately, this emerging educational paradigm does not take into account the historically rooted systems of disadvantage that structure access and opportunity for various groups in globalized societies. In the U.S., for example, the rapid racial (re)segregation of schools and the concomitant unequal distribution of resources between minority and non-minority schools (Orfield & Eaton, 1996) shape access to curricula and technologies that apprentice learners into the literacy and numeracy skills required for successful participation in the emerging globalized societies.

To conclude, the processes of globalization in conjunction with neo-liberal economic theory have changed the landscape of educational thought so that social efficiency has become an overriding goal of education policy makers in many countries at a time when student populations are becoming increasingly culturally and linguistically diverse. These policy

directions, with an emphasis on production of knowledge-rich citizens who can become flexible, efficient workers in a competitive global environment, have profound implications for students with disabilities and inclusive education. There is emerging evidence, for instance, that English language learners (ELLs) (immigrant and nonimmigrant) are disproportionately placed in special education in some regions of the U.S. (Artiles, Rueda, Salazar, & HigaReda, 2005). This state of affairs raises still another set of questions that focus on inclusive programs on a broader level: How are inclusive education programs serving students who inhabit transnational contexts? How are inclusive programs taking into account the lives of students who navigate multiple cultural worlds? Do we have evidence about the impact of globalization and neo-liberal policies on the consolidation of inclusive education?

Learning in inclusive education research

Inclusive education research has a broad focus and addresses many interrelated questions. The bulk of this literature addresses the *implementation* of programs, and thus we summarize and analyze such research. We should note that most of the research on inclusive education has been conducted in the U.S. and the U.K. The research can be grouped in two categories, namely research on inclusive education from a whole school perspective and research on aspects or components of inclusive education, which is generally classroom based.

Whole school models of inclusive education

We have two goals in this section. First, we outline the main findings from major reviews of the literature to set the context for our second goal, namely present a more detailed analysis of a research program on whole school models of inclusive education implemented in the U.K. The literature reviews were concerned with school efforts to enhance the participation of all students (Dyson et al., 2002) and the impact of inclusion on students without disabilities (Kalambouka et

al., 2005). Although other reviews have been reported in the literature (Harrower, 1999; Manset & Semmel, 1997; Salend & Duhaney, 1999), the two selected syntheses are among the most comprehensive and systematic efforts to date. Some of the main findings from the Dyson et al. (2002) review include:

1. Studies included in the review ($n = 27$) were based on case study designs about the structures and processes of inclusion models.
2. Most of this research was cross-sectional and conducted in primary schools self-identified as inclusive or selected by researchers or other informants as pursuing an inclusive agenda.
3. Many studies had considerable methodological weaknesses and offered poor reports.
4. The evidence was based mostly on interviews and unstructured observations.
5. Interviews were often conducted with teachers and other stakeholders (e.g., administrators, parents, students) and generally focused on participants' descriptions of school inclusive cultures (e.g., features of such cultures and factors that supported an inclusive school culture). Teacher perspectives dominated research reports. Hence, the evidence on school cultures is mostly grounded in teachers' beliefs and views about their schools.
6. The studies did not seem to coalesce around a set of overarching questions, frameworks, or settings. Thus, the reviewers did not find evidence of a programmatic agenda in inclusive education research.
7. Most studies "simply reported on some aspect of diversity, action, or participation while a smaller number presented what we judged to be *detailed* data" (p. 3, emphasis in original).

8. Inclusive school cultures embraced the value of respect for differences and a commitment to support the presence and participation of all students. Strong leadership committed to inclusive cultures had a visible presence in these schools. Despite the presence of tensions and disruptions in inclusive schools, participatory approaches that included all stakeholders (e.g., pull-in instructional models, constructivist pedagogies), collaborative practice, and collective problem solving were distinctive features of these school cultures.

9. Most of these studies privileged schools' cultural cohesion—i.e., researchers assumed there was a cogent and seamless school culture that supported inclusion. Contradictions and anomalies within school cultures were neither documented nor examined.

10. Systematic analysis of the links between participants' beliefs and values, school structures and practices, and student outcomes were not examined. In most cases, such link was merely stated or self reported. According to Dyson et al. (2002), "the assumption seems to be that the strong assertion of inclusive values by teachers leads inevitably and unproblematically to greater inclusion for students" (p. 50).

11. Student outcome data were not always reported and it was not uncommon to find outcome data reported by school personnel or "inferred from an account of teacher practices ... Direct reports of outcome data are rare" (Dyson et al., 2002, p. 50).

The literature review reported by Kalambouka et al. (2005) offers the following conclusions:

1. The analysis of 26 studies on the impact of inclusion on nondisabled students suggests many studies included pupils with intellectual and learning difficulties. Unfortunately, research reports were not always clear on the types of special needs represented in the study samples; thus, "it is difficult to provide direct conclusions regarding the impact of including pupils with a

specific type of [special needs] on the academic and/or social or other outcomes of all school pupils” (p. 4).

2. Over half of the selected studies were published in the 1990s ($n = 15/26$) and the vast majority was conducted in the U.S. ($n = 22/26$).

3. Studies documented academic outcomes (e.g., standardized tests, class tests, teacher ratings) and social outcomes; almost half of these studies (12) documented only academic outcomes.

4. The nature of inclusion in this research was defined either as the proportion of students with special educational needs in a general education classroom or the number of hours spent in a general education classroom every day (or week). However, the authors expressed a serious concern about the

slightly loose or uncertain way in which the term ‘inclusion’ was defined ... It was not always clear whether the inclusion arrangements involved fulltime placement in mainstream class; whether and to what extent such placements were supported; and whether pupils were withdrawn to other special classes for certain lessons and for how long...All this means that it is not possible to judge from the review whether or not certain types of inclusion arrangements were associated with particular academic or social outcomes (p. 64).

5. Previous literature reviews offered mixed results on the impact of inclusion on nondisabled students. In contrast, these reviewers concluded the inclusion of students with special needs and disabilities in regular schools does not have a negative impact on the academic and social performance of students without special needs and disabilities, particularly if a support system was an intricate component of the inclusion model—there was a slightly greater positive impact

for academic outcomes. The only exception was (compared to the other groups of special needs/disabilities) when students with emotional/behavioral disorders were included, there seems to be more negative outcomes. It should be noted that the data on the impact of inclusion was not examined across various curriculum subjects.

6. Successful inclusive education programs are the result of intensive, coordinated, and systematic work that is grounded in a strong and explicit commitment to an inclusive vision of education on the part of parents, students, and professionals. Moreover, “programmes of work have to be carefully planned and reviewed regularly; and support staff need to work flexibly as a team and receive appropriate support and training” (p. 5).

In summary, although there are promising preliminary findings in the reviews of the empirical knowledge base on inclusion (e.g., features of inclusive school cultures), significant gaps and limitations were identified in the conceptual and methodological bases of this research. The reviewed body of work purportedly have the characteristics of an *emergent* knowledge base in which an emphasis on descriptive accounts pervade, conceptual refinement and strengthening of methodological rigor are needed, and a lack of understanding about the complexities of the phenomenon are apparent (e.g., causal links between practices and outcomes, interactions between types of interventions, subpopulations, and setting types).

Since the focus of our analysis is views of learning in inclusive education research, we were surprised to find a lack of attention to this construct. When research was framed from a community-centered perspective of learning (Bransford et al., 2000) (i.e., inclusive school cultures), measures of outcomes were indirect (e.g., teacher reports). It was equally unexpected to find an explicit attention to learning outcomes *with a particular emphasis on students without disabilities* (as opposed to *all* students). Although a focus on academic outcomes has been

stressed, we asked whether a closer look at a program of research would help us understand better the views of learning used in inclusion research.

A closer look at learning in whole-school inclusive education research

To address this question, we concentrated on a program of research conducted in recent years in the U.K. by Mel Ainscow, Tony Booth, Alan Dyson and their colleagues (Ainscow, Booth, & Dyson, 2006) because it represents a sustained effort to document the processes that unfold in schools to develop inclusive education models. These researchers use the whole school as the unit of analysis and their work is based on a broad definition of inclusive education—i.e., “reduce barriers to learning and participation that might impact on a wide range of students” (Ainscow, Booth, & Dyson, 2004a, p. 2). Note the view of inclusion is framed with an explicit equity focus (i.e., reduce barriers) and is aligned with the definition outlined in a preceding section that encompasses presence, participation, acceptance, and achievement. Consistent with the inclusion literature discussed thus far, although the target population in this program of research tends to be identified in rather ample terms (e.g., all students, a wide range of students), the main group of interest is students with special needs and disabilities—at least as reflected in most examples provided in the work published by this team of investigators.

One aspect of interest for this team is how schools address the tension found in the current education reform climate in the U.K. between the social justice agenda of the inclusive education movement and the neo-liberal economic competitiveness rhetoric that permeates the standards reforms. Ainscow and his colleagues identify two stances toward this situation that they label pessimistic and optimistic views. The former argues that the standards movement grounded in market driven policies hinder the creation of school cultures supportive of inclusive education. In contrast, the optimistic view contends inclusive practices are “likely to emerge

under appropriate organizational conditions” (Ainscow et al., 2004a, p. 15). From this perspective, it is argued that schools can engineer processes and structures that buffer the anti-inclusion pressure of the standards reforms.

Project focus and design. The project was framed as a school change effort and the guiding premise of the work was that “outsiders” (university researchers) can work collaboratively with “insiders” (teachers, parents, students) to gain a better understanding of and develop ways of addressing barriers to participation and learning (Ainscow et al., 2004b). The team created a network based on an action research approach to work in 25 schools distributed across three local education agencies (LEAs) in a four-year period (1999-2004). The questions addressed in this work include (Ainscow et al., 2004b (a) an exploration of students’ barriers to participation and learning; (b) identification of the practices to address those barriers; (c) how identified practices contribute to improved learning outcomes and (d) ways to sustain and encourage successful practices. Participants included three university teams (Manchester, Canterbury, and Newcastle) and about one hundred teachers and school personnel. Teams of school personnel and university researchers collaborated in the analysis, design, and implementation of inclusive practices. The project allowed participants to be responsive to local needs and priorities. Although there was variability across sites, schools generally relied on a common model: a small leadership team was appointed (it typically included the principal, among others) that led efforts to identify a work agenda. The process included an analysis of current practices and the creation of a plan, and its implementation to transform the school into an inclusive organization. Support from the university and LEA teams was available through regular meetings in which evidence collected by each party was shared and examined critically. Meetings with other schools within and across LEAs, and national conferences were used as

means of support. The academic teams created a support system within the network that included regular meetings, communications, and sharing of analytic papers and memos about developing themes and patterns. The evidence included parent, professional, and student interviews, observation data (fieldnotes, videos), notes from meetings, school evaluation data, materials produced by university and school participants, and conference products. An online database was created with private and public levels of access to support the work of the teams (Ainscow et al., 2004b).

In contrast to prior inclusive education work, the research team opted to recruit so called “typical schools” that were grappling with the changing demands of an increasingly diverse student population in a standards based policy environment. LEAs initially invited schools to join the university teams in the examination of “participation in teaching and learning, and taking action to improve it” (Ainscow, Howes, Farrell, & Frankham, 2003, p. 229). Most of the schools that joined the Manchester research team had recently appointed principals and half of the schools had been classified as “being in serious difficulties” (p. 229).

Ainscow and his colleagues (2004a) characterized their project as “critical collaborative action research” in which inclusive education tenets were used inductively to examine local practices and develop action plans to become more inclusive. The work of school-university teams was also concerned with a critical analysis of the standards movement and how it might affect their inclusion-oriented work. More importantly, the analytic and planning labor was deliberately concerned with using school personnel’s agency in the creation of opportunities to navigate the anti-inclusion pressure of the standards movement while they worked to build inclusive programs.

Learning in whole-school models: Overview and issues with core constructs. Ainscow and his colleagues (2004a) explain their work is concerned with the creation of collaborative school cultures that “support particular kinds of *professional and organizational learning*, which in turn promote the development of inclusive practices” (p. 6, emphasis added). This is an ambitious vision, indeed. A community-centered perspective (Bransford et al., 2000) is emphasized in this program of research as reflected in its concern for engineering school cultures that are grounded in inclusive practices. In fact, Ainscow and his colleagues acknowledge the influence of sociocultural theories, particularly Wenger’s (1998) work on communities of practice. From this perspective, the consolidation of communities of inclusive practice is the goal of their efforts in which learning is regarded as “a characteristic of practice” (Ainscow et al., 2004a, p. 7). It is explained that, “practices are ... ways of negotiating meaning through social action” (Ainscow et al., 2004a, p. 7). Aligned with Wenger’s work, meaning is created through participation and reification. As members of school communities participate in daily routines and build collective histories, they construct shared meanings of notions such as “inclusion,” “competence,” or “unacceptable behavior.” At the same time, school communities create reifications of their practice—i.e., tangible means and strategies to represent what they do (e.g., planning artifacts, behavioral rules, flow charts to outline pre-referral interventions). Ainscow et al. (2003) cite Wenger to explain that the interconnections between reification and participation constitute learning in communities of practice.

A closer look at this work raises questions about the nature and boundaries of “practice” (Little, 2002). More specifically, teams of researchers and practitioners gather outside of classrooms and other settings in which their routine professional work takes place to analyze such work. The practice of analysis in these distal settings is expected to change the routine

professional practices enacted in classrooms, assessment rooms, etc. What constitutes the core practices of these communities? Is the central practice what teachers do in classrooms or what they do in the meetings where evidence is analyzed? If it is both, what are the inter-textual processes that mediate professional learning (Floriani, 1993)? Do these communities prescribe rules or criteria for acceptable forms and means of representation of practitioners' practices? What is, to borrow from Little (2002), the "situational relevance," of the evidence that teachers bring to these analytic sessions (e.g., anecdotes, stories, work samples, questions)? Is learning expected to unfold in both settings? How is learning accounted for in each setting?

Unfortunately, these issues about the idea of practice are not clearly addressed in this work.

The focus on interpretive processes that mediate how communities of practice make meaning is an important assumption of this team's work because it foregrounds the agency of communities and the dialectics of micro and macro processes. More specifically, these authors argue that, "external agendas cannot simply be imposed on communities of practice ... external policy agendas, however powerfully enforced, have to be endowed with meaning within a local context before they can inform practice" (Ainscow et al., 2004a, p. 9). This assumption helps us understand why there is considerable variation in schools' responses to national reform agendas such as standards. An apparent gap in this work, however, is the lack of documentation and analysis of specific local episodes that would enable researchers to link people's agency and labor with larger historical and institutional processes and forces (Engestrom, Miettinen, & Punamaki, 1999).

The authors stress a normative dimension of communities of practice in which schools achieve cohesion as a way of building inclusive practices. They favor a situated perspective in which local understandings of ideas (e.g., inclusion) are emphasized and the shared histories of

participants contribute to crafting distinctive communities of practice in particular schools.

Although we find in this work an acknowledgement of the tensions and issues that arise in the process of building inclusive school cultures, the end point of such labor seems to be embodied in a monolithic view of inclusive school culture. We see, therefore, that the notion of tensions or contradictions can be examined in at least two different ways. First, contradictions, disagreements, and tensions can arise among participants as a result of the work that is done in schools to investigate local practices. Ainscow and his colleagues report such disturbances as school personnel struggle to become more inclusive. However, a point that is not recognized in this work is that such contradictions could contribute to the formation of various groups or coalitions that form their own communities as school strive to become inclusive. This means that the development of inclusive schools might encompass the configuration and reconfiguration of a multiplicity of communities of practice that result from the negotiations and deliberations of the school personnel. From this perspective, inclusive schools do not have monolithic cultures; unfortunately, a sizable proportion of the inclusive education literature endorses the assumption of thoroughly cohesive school cultures.

A second way in which contradictions can be examined is as the impetus for change. Reminiscent of cultural historical activity theory (Engestrom et al., 1999), Ainscow and his colleagues (2003) explain anomalies or contradictions in school local practices can be the engines of change, though not all instances of emerging contradictions resulted in transformed school practices. School traits help explain the differences in responses to these anomalies (e.g., principal's leadership style, engagement with evidence, the cohesion of a community of practice). They describe disruptions as *external* (e.g., planned interventions from university staff, observations of other schools) and *internal* (e.g., school teams' identification of disturbances in

data analysis sessions of their own practice) (Ainscow et al., 2004a). These activities or incidents compel school personnel to question what is taken for granted (e.g., beliefs, premises, assumptions) and sometimes such interpretive processes result in the reformulation of standard or routine practices. It should be noted, however, that school change was not smooth. Indeed, resistance and multiple contradictions often co-existed in the participating schools.

Gallannaugh and Dyson (2003), for instance, documented how school personnel initially interpreted low student attainment and the school's failure to achieve the prescribed standards as the result of students' social class disadvantages. Through the collaborative analysis of evidence, however, school personnel gained increasingly sophisticated understandings of their labor, and the deficit views they first espoused about their students were gradually transformed as they witnessed what students were able to do. Examples of tools or contexts used to mediate professionals' action research efforts included advisory teachers that led teacher study groups, visits to other schools, and examination of evidence such as student and parent interviews, case studies, teacher interviews, observations of other teachers' classroom practices, video-recordings of teaching episodes, test results, attendance registers, exclusion records, and observations in other schools in the LEA. The critical point about these exercises is that the analyses or discussions of evidence create conditions to question assumptions taken for granted and making the familiar unfamiliar to explore alternatives for the renewal of practice (Ainscow et al., 2003). Thus, this work stresses the role of mediation in learning that is distinctive of a social constructivist metaphor. Unfortunately, aside from researcher statements or participants' self-reports about these mediating experiences (e.g., "Some school staff reported learning a lot from an environment where sharing difficulties was encouraged, rather than presenting accomplishments;" Ainscow et al., 2004b, p. 132), a detailed documentation of how mediating

processes were actually constructed in interpersonal contexts is needed. This lack of analytic attention to actual interpersonal processes is consistent with research on communities of practice with teachers for the purpose of professional development (Little, 2002; Wilson & Berne, 1999). It seems *learning* (changing participation) in this research includes both, *changes in practice* and in *organizations' problem solving approaches*. Similar to the research on teacher change (Richardson & Placier, 2001), this work seems to be grounded in the assumption that changes in practice index improvement. However, it is not clear whether the available research evidence supports this assumption.

An important theoretical extension of the community of practice idea is that learning is constituted in identity projects because people are always becoming someone else in the process of participation (Lave, 1996). The whole school model of inclusion research has not used this core notion thus far.¹ Attention to the idea of identity projects as part of the notion of changing participation has the potential to enrich this program of research. For instance, we raise questions above about the implicit assumption of monolithic inclusive school cultures and about the lack of attention to the formation of sub-communities as inclusive school cultures are forged. It is feasible, for example, that people resist or engage in “non-participation” in these whole school projects. Hodges (1998) explains that individuals in communities of practice might not identify with the identities that signal membership in a community of practice, yet they accommodate through some way of participating in the community’s normative practice. As she describes it, non-participation defines a clash between participation and identification; “it is a split between a person’s activities and their relations with participation, a rupture between what a person is actually doing, and how a person finds [herself] located in the ‘community.’” Nonparticipation

¹ There are instances in which the researchers describe participants in terms of “outsiders” and “insiders,” though these terms tend to be defined categorically—e.g., from outside local sites (e.g., staff from other schools in the LEA) or outside of the professional community (researcher v. practitioner).

describes how a person might be participating in the contexts of grappling with possible, albeit mutable, identities” (p. 272-273).

A documentation of identity projects as a form of changing participation in inclusive schools will help understand the micropolitics of school change and how members of communities might (mis)align with visions of inclusive education. Ainscow et al (2004b) alluded to schools in which the notion of inclusive education is defined in alternative ways that were not always consistent with the researchers’ vision. They found, for instance, that “many schools are interpreting ‘inclusion’ to mean enabling low-attaining students to meet national targets in key areas. In this sense, the target setting agenda has colonized the liberal/rational notion of ‘inclusion’ ” (p. 135). What happens when school staff “dis-identifies²” with inclusive communities of practice and subscribe to a standards agenda, yet they manage to participate in the emerging inclusive school culture? Are processes of exclusion triggered for these individuals? To borrow from Hodges, how do such “agonized compromises” (p. 279) affect the culture of the school and the identities of these individuals? What forms of *difference* are created in these inclusive contexts? How is such identity work interactionally achieved?

Theoretical and methodological benefits will be gained from addressing these ideas and challenges. For instance, researchers will be compelled to disentangle the constructs of *participation* and *identification* in communities of practice. This in turn, will enable future research to address the role of power and privilege in the construction of communities of inclusive practice by examining the construction of identities and marginalized positions within communities. Methodologically, researchers will need to document and analyze interactional and discursive processes from micro and situated perspectives.

² Hodges (1998) describes dis-identification when a “person may be rejecting the identity connected with the practice and yet is reconstructing an identification within the context of conflict and exclusion” (p. 273).

Tensions between an individual v. a community focus. Ainscow and his colleagues (2004a) make the argument that a condition for organizational learning is that “someone in particular has to recognize a problem as an anomaly and to convince others ... individuals can be powerful inhibitors or facilitators” (p. 12). This is an interesting emphasis because it addresses one of the criticisms of community-based models of learning—i.e., that the role of the individual tends to be under-examined, thus losing important information about what a learner actually learns in a community. In this work, learning (i.e., changes in a community’s practices or problem solving approaches) is contingent upon professionals’ agency.

The individual is also acknowledged from the perspective of students. One way in which this is done is through the analysis of outcome evidence by subgroups of students. It could be argued that an implicit assumption of such exercise is a requirement for monitoring potential exclusionary practices for different types or groups of students with distinctive traits (e.g., “at risk” pupils). At the same time, the view of inclusion used in this program of work is critical of “the assumption that some students’ characteristics are such that they require a different form of teaching from that offered to the majority of students” (Ainscow et al., 2003, p. 239). It is interesting that student traits are dismissed as an analytical category in the context of instructional prescriptions, but they become a legitimate focus of examination for equity purposes. This means that, in addition to a community centered perspective, a learner centered model of learning (Bransford et al., 2000) is used, though in a rather distinctive way.

Another way the individual student perspective is acknowledged in this work is in the discussion of student responses to the current standards movement in the UK (Dyson, Gallannaugh, & Millward, 2002). The accountability movement in this nation compels practitioners and students to achieve certain outcomes. However, teachers face a uniquely

difficult situation as they strive to routinize their professional practice in the midst of rapidly changing complex conditions that incorporate non-inclusive accountability policy demands, pressures to build inclusive schools, uncertainty about how accountability mandates are to be implemented, and a changing student population. Thus, students witness and respond to teachers' struggles to enact inclusive education practices in policy and organizational climates that discourage inclusion and are dissonant with the student population's experiences and realities (Ainscow et al., 2004a; Dyson et al., 2002). It follows that school ecologies are fraught with tensions and contradictions and students do not always respond in the ways anticipated by inclusion advocates. As Ainscow et al. (2004a) explain,

...some evident mismatch between the established practices of the school and the actual outcomes of that practice has become apparent. This might relate to a group of students whose exclusion from classrooms ceases to be taken for granted, or a number of students who 'disrupt' established practices, or large numbers of students who 'fail' to reach national targets" (p. 14).

Again, the attention to student perspectives and "realities" strengthen the emphasis on learner-centered models of learning. Ainscow and his colleagues explain the focus of their work is to develop inclusive schools, which can be characterized as "a process of learning about how to learn from differences" (Ainscow et al., 2003, p. 233). Now, by alluding to the need to understand pupils' realities and lives (in the context of contemporary standards reforms), these researchers open a space for a more critical analysis of inclusive education. It would be possible, for example, to examine how race, gender, social class, language, and immigration status mediate students' experiences of inclusive education and standards. How does such a "cultural-historical baggage" (Hodges, 1998, p. 283) in a class-stratified and racist society (Diniz, 1999)

mediate student experiences in schools that are grappling with inclusive and standards agenda in this globalization era? Ainscow and his colleagues do recognize the need to focus on such contentious forms of difference (e.g., Ainscow et al., 2003, p. 239), but evidence in which such analysis is conducted is missing in this body of work. The idea of difference tends to be addressed through a (dis)ability perspective.

The elusive quest for outcomes. The research team used the Index for Inclusion (Booth et al., 2000) to help guide school teams' documentation of school practices and outcomes. The Index operationalizes inclusive school practices in three dimensions, namely practices, policies, and cultures. The Index is grounded in two research literatures: inclusive practices and school improvement (Ainscow et al., 2004b). School teams were assisted by university teams to create success criteria with regard to learning outcomes and monitor the impact of efforts to transform their schools. For this purpose, it was reported that schools created quantitative profiles to monitor the impact of the project. Evidence included test scores, student attendance, suspensions and other forms of exclusion, number of staff, etc. for the whole school as well as for groups of students "that are known to be statistically 'at risk' of marginalization in schools" (Ainscow et al., 2004b, p. 129). Unfortunately, we could not locate reports and analyses of these data.

In addition, the research team invited participating practitioners to identify the student outcomes generated by the work done in the project. The task was framed consistent with the national standards movement (e.g., academic achievement, student attendance). Interestingly, teachers were not inclined to engage in such task because "they did not see their work as a mere technical exercise in raising levels of attainment" (Ainscow et al., 2000a, p. 14). Teachers' argument was that the project's agenda compelled them to question the relevance and usefulness of the mandated practices for the lives of students served in their schools. Rather, their work

focused on reconfiguring practices to be responsive to the lives and needs of the student population; ultimately, these efforts led to a concern for “students’ engagement with learning and their sense of themselves as learners” (p. 15). Therefore, Ainscow et al. (2004a) argue that participating teachers became involved in a sort of a transformative project in which the collaborative nature of practice called for in an inclusive education model made visible the limits and problems of the traditional schooling practices that underlie the current standards reforms. A byproduct of dealing with this tension was that participants critiqued mainstream schooling practices and the requirements of current national reforms that reproduce them, and embraced a more inclusive stance toward their labor. It was further explained that “soft measures” (e.g., student and teacher interviews, classroom observations) are better suited to monitor these outcomes.

In summary, Ainscow and his colleagues put forward a situated model of learning in inclusive education models. In such paradigm, although characteristics of locales and communities mediate what gets accomplished, a significant influence comes from the social spaces created when communities of practitioners grapple with anomalies and contradictions that arise from the examination of routine practices in the midst of multiple contradictory reform demands (Dyson et al., 2002). Although it was not articulated in this way, it seems as though the research team argued that (to borrow from Wertsch), *the process is the product*. However, as they explain, the presence of contradictions is not a sufficient ingredient for organizational learning; it depends on how analytic processes are enacted to create productive dynamics that encourage change. Hence, “the development of inclusive practices, particularly on a wide, national basis, might best be achieved not by seeking an improbable *transformation* of schools, but by an *incremental enhancement* of the processes which make the existing dynamic

productive in an inclusive sense” (Ainscow et al., 2004a, p. 16, emphases in original). Finally, we identified unique tensions related to how learning is framed (practice change, problem solving) or under-examined (i.e., identity processes), and the units of analysis (community v. individual) used in this program of research. We now turn to a discussion of inclusive education research that focuses on classroom contexts.

Classroom based studies of inclusive education

The majority of research on inclusive education at the classroom and student level has focused on processes of instruction that produce specific outcomes designated by the researchers. Questions are dominated by issues of technique such as what kinds of approaches to teaching students to problem solve in mathematics produce the most robust results including knowledge production and transfer? Or, researchers might ask how should students be grouped to ensure that skill development is acquired by all students? The assumption is that once these techniques are uncovered, practitioners, particularly teachers, will adopt and use these techniques in their own teaching. What is missing in this work is the analysis of the complex labor students and teachers jointly create as they build identities as learners engaged in the production of schooling. Furthermore, this inclusive education research also needs to situate the analysis of identity production processes in the contemporary contexts of ongoing assessments imposed on teachers and students both by external measures such as standardized and standards-based assessment, and by classroom anchored measures of academic progress that examine changes in learners, learners participation, and learner leadership as well as context. In other words, what is missing in this work is the theoretical lens on complexity used in whole school based inclusion research. The prevailing assumption in classroom-based research is that technique is the essential and most critical variable in producing learning for students. Further, the research assumes that learning is

measured by knowledge and skill acquisition. In much of inclusive classroom research, the interaction between student ethnicities, languages, cultures, and background experiences and their classroom experiences and accomplishments remains unexplored (Klingner et al., 2005).

Research on inclusive classroom practices has generally revolved around two themes. One theme has focused on the experience of inclusive classrooms for students with and without disabilities as well as their general and special education teachers (e.g., Giangreco, et al., 1993; Kozleski & Jackson, 1993). This theme also encompasses instructional processes such as peer assisted teaching and cooperative learning (e.g., Greenwood & Delquadri, 1995; McMaster, Fuchs, & Fuchs, 2006) and the ways in which special and general educators work together in the same classroom (e. g., Magiera, Smith, Zigmond, & Gebauer, 2006; Pugach & Johnson, 1995). A second theme encompasses studies about what and how to assess and teach in specific content areas including literacy, mathematics, science, and social studies (e.g., Fuchs & Fuchs, 2005; Swanson, 2006). While these two themes have addressed on very different aspects of classroom research, they have both essentialized classroom practice. For example, neither theme foregrounds the complex interactions within classroom contexts such as those between students, their teachers, and the ongoing construction of classroom cultures and individual identities. Instead, research seems to focus on one variable, such as how students with learning disabilities like inclusive classrooms (Klingner, Vaughn, Schumm, Cohen, & Forgan, 1998) or how grouping affects reading achievement (i.e., Schumm, Moody, & Vaughn, 2000). Nevertheless, interdisciplinary scholarship on teaching and learning suggests classroom contexts include such features as teacher and student activity for explicit and implicit purposes, the impact of classroom materials on the dynamics of learning, the interaction among home and school cultures, teacher and student experiences, tools for instruction, routines, roles, and expectations

(Gallego, Cole, & Laboratory of Comparative Human Cognition, 2001). These multiple dimensions of the classroom context flavor and complicate the process of teaching and learning. Research that fails to account for these and other complex dynamics in classrooms runs the risk of shaping practice with unintended yet pernicious consequences. Instead, much of the research on inclusive practices focuses on uni-dimensional aspects of instruction within the classroom.

Experiences in Inclusive Classrooms

The trajectory of research on the social benefits of inclusive classrooms provides one example of this uni-dimensional exploration of learning in classrooms. As late as the 1970s, researchers were only beginning to learn how to teach students with severe disabilities. Primarily relegated to living in institutional, congregate care settings throughout the United States, children and youth with severe disabilities did not attend schools or receive educational services. Parents were counseled by their physicians and encouraged by their families to institutionalize their children. In the early seventies, institutions for children with severe disabilities were found in every state in the United States. For the most part, institutionalized children were considered to be uneducable until the work of Charles Ferster and B. F. Skinner (1957), Foxx and Azrin (e.g., Azrin, Besales & Wisotzek, 1982), and others who applied the principles of classical conditioning and stimulus-response learning to teach children with severe disabilities to communicate (e.g., Kozleski, 1991), to reduce problem behavior (e.g., Axelrod, 1987), to build functional reading skills (e.g., Gast, Ault, Wolery & Doyle, 1988), and to engage in leisure activities (e.g., Nietupski, Hamre-Nietupski, et al., 1986).

An advocacy framework grounded this work. By learning how to instruct students with severe disabilities, advocates for persons with severe disabilities demonstrated that it was possible to develop sets of skills that would help them leave institutions and have opportunities

for living in communities. By the eighties, teaching procedures researched in institutional settings were brought into classrooms, first in separate schools, and later, in neighborhood schools to teach students with severe disabilities to manage their own care (e.g., brush their teeth), to develop functional skills for transportation (e.g., riding the bus), unskilled labor (e.g., sorting mail), leisure activities (e.g., visiting the mall, renting a video), and home life (e.g., keeping an apartment). Because initial research focused on how to teach in an institutional setting, much of what was taught reflected what was available in institutions and perceived as beneficial for the students (Smith & Kozleski, 2005). What was being taught reflected the movement from institutional to community-based placements.

However, as students with severe disabilities were brought into neighborhood schools, the content of what was considered to be state of the art curricula became a barrier for their inclusion in general education classrooms. The paradox was that the functional curricula that provided the impetus for institutional emancipation became a barrier for inclusion in general education classrooms. Special educators who taught students with severe disabilities were ill-prepared to generalize their teaching strategies to the school curriculum. General educators felt ill-prepared to teach functional skills in addition to their classroom curricula.

On the one hand, behaviorism helped to establish that students who were viewed as expendable were, in fact, capable of learning and developing functional behavior and communication. The methods that uncovered these processes were empirically derived and followed tightly focused systematic methodologies in which one variable at a time was introduced after a baseline was established. Because there were few participants available to involve in these studies, most of the researchers followed a single subject design model in which baseline and treatment conditions were proxies for control and experimental groups in large

group experimental design. The detailed studies that documented these breakthroughs helped to establish a mandate for the right-to-education. Yet, the content of what was taught operated in pernicious ways to limit the view of what was possible or appropriate to teach students with severe disabilities. For instance, one of the deeply held tenets of instruction at this time was that instruction needed to occur in environments that were authentic or as nearly authentic as possible. So, if a researcher was exploring methods for teaching individuals with severe intellectual disabilities to ride public transportation, then, the best environment for instruction was public transportation. This approach was developed to solve issues that revolved around generalization of learning from familiar to novel situations. Not until the early nineties did a group of researchers begin to examine the constraints that such a view of human behavior placed on individuals with severe disabilities.

Two studies published in 1993 explored the effects of placing students with severe disabilities into general education classrooms (Giangreco et al., 1993; Kozleski & Jackson, 1993). Socially and behaviorally, the students in each of these studies were able to participate in general education classrooms although they were described as having severe sensory and intellectual disabilities. Students in both studies were able to learn alongside their classmates although their participation may have been limited, and, according to classroom observation, interviews with their classmates or their teachers been seen as members of the classroom community. Each of these studies provided a snapshot of what classrooms might look like when students with severe disabilities were added to the classroom mix. Data in one study focused on the social benefits of inclusion in general education classrooms for the students with disabilities and their classmates without disabilities as well as evidence of learning for the student with

severe disabilities (Kozleski & Jackson, 1993). In the other study, the experiences of general education teachers were explored.

Unlike the earlier studies that focused on counting the number of times students produced particular kinds of behaviors, these studies combined classroom observation, field notes, student and teacher interviews in a year long study (Kozleski & Jackson, 1993), and in a retrospective study (Giangreco et al., 1993). Kozleski and Jackson observed over a full year the evolution of relationships, taking time to interview and survey children and teachers periodically about their experience of the social and learning environments in the classroom. But even in this study, the focus was on an individual student rather than on the social activities of the group. Learning was defined as knowledge and behavior acquisition. The role of the teacher in mediating the relationship between students remained unexplored although attitudes and feelings of the students without disabilities were tracked over time as students became more familiar and interactive with the student with severe disabilities. Missing in this study and others like it was an understanding of the construction of identity in response to new challenges that existed in the classroom because of the student with disabilities.

In the Giangreco study, which relied on semi-structured teacher interviews and a follow-up teacher survey, the focus was the changes in behavior that teachers made over the course of the year in which they had a student with severe disabilities in their general education classroom. Interviews revealed that teachers began the year feeling resistance to being asked to have a student with a disability in the classroom. Teachers were also anxious about their responsibility and their ability to teach a student with disability. The researchers chronicled substantial changes in teachers' attitudes over time. For instance, teachers reported at the beginning of the year that they would report on the number of students in their class as 20 plus the child with a disability.

Over time, they dropped singling out the child with a disability from the count. The teachers reported realizing that the child with a disability had become a member of the class, not an outsider. Clusters of these kinds of changes seemed to signal a transformational change in the teachers in which the teachers reframed their identities as teachers of all the students, not only the general education students. Giangreco and his colleagues noted that these kinds of changes seemed to occur as the teacher became more likely to use cooperative learning groupings, observe how their students interacted among each other and adopted those techniques, and used learning methods that were more discovery or inquiry oriented rather than teacher directed. The researchers explored the variables that led to these favorable outcomes for 17 out of the 19 teachers they studied. They concluded that teacher characteristics were responsible for teacher transformation rather than exploring the interactive nature of the students, the curriculum, the external supports, and the teachers' identities. This study, like the Kozleski and Jackson study, focused more on isolate variables rather than on the complexity of interactions occurring simultaneously in the classroom.

Both studies were products of a cognitive behavioral orientation to understanding complex human interaction. From this viewpoint, the variables of interest remain those observable elements of classroom practice that can be defined and observed across researchers. Key to this approach is a research methodology that seeks to achieve inter-rater reliability in order to *collect* valid data rather than the collection of multiple sets of data that are available for multiple interpretations from researchers who seek common ground after discussion of a variety of plausible explanations. Thus, observation itself is purposefully focused on a tightly constrained set of behaviors to the exclusion of other activity or events that may be occurring simultaneously in the environment. Researchers refrain from using additional information from

the environment to inform the research question. This research methodology means that complexity within activity arenas is minimized as a premise for conducting research.

As researchers in this tradition moved from observable behavior to understanding how cognition mediates behavior, they developed methods that help to link internal decision making to explicit and observed behaviors. Thus, Giangreco's research team sought explanations for changes in how teachers discussed their students by linking interview data to observed behavior. By focusing early on identifying causal patterns, researchers may inadvertently omit important and complex variables that may be shaping their findings. This approach was repeated in a set of studies conducted later in the nineties and early in 2000 and 2001.

This set of studies examined the social and academic experiences of students with learning disabilities in inclusive classrooms (i.e., Klingner et al., 1998; Klingner, & Vaughn, 2002; Schumm et al., 2000). Some of these studies examined how co-teaching and collaborative/consultative teaching models influenced student academic achievement while others examined how students with learning disabilities fared socially in inclusive settings. One study followed a single special education teacher over a seven-year period of time as she changed her role from being a resource room teacher to a collaborative/consultative special education teacher.

During the first year in which the special educator's role changed, teacher time in the school was organized in ways that supported joint planning time, shared unit and lesson planning. The special educator had enough time with her colleagues to align her teaching strategies to those of the classroom teachers, and to consult with her general education colleagues during times where they were not scheduled to be teaching. As the special educator navigated changes in her role, she also kept a reflective diary throughout the year in which her

challenges and successes were noted. The diary was used as a communication tool between one of the researchers who was also serving as a mentor as the school underwent the change in service delivery model. The researcher wrote comments or suggestions back to the special educator in the diary. Interviews with the special educator, her general education colleagues and building administrators were also conducted each of the seven years of the study. Focus groups were conducted twice, in years 2 and 6. Classroom observations were conducted each year. Researchers kept field notes throughout each year of the study. In the last year, the special educator reviewed her diary from the first year and made oral comments into a tape recorder after passages, interrogating her own thinking and adding to the comments that she had made originally.

What the researchers found was that the special educator's role was complex and multifaceted. Her ability to support students with learning disabilities in the general education classroom rested on her communication skills, her knowledge of special education services and supports, her ability to co-plan with general educators, her dedication and persistence, and her ability to accommodate whole-class instruction for students with learning disabilities.

An interesting but somewhat unexplored aspect of this study is the special educator's construction of her own identity. Over time, as the institution in which she worked expected changes in how she achieved institution goals (i.e., be an inclusive school), her identity as a teacher shifted dramatically. From being a teacher that worked directly with students that she perceived as her own, she became a support to other teachers and the work of other teachers' classrooms. The article mentions her sense of loss as a teacher but the construction, deconstruction, and reconstruction of this identity and how it occurred was not the focus of the study. Instead, views of what occurred were emphasized such as which roles the teacher liked

and how well she did them. The researchers focused on what activities the special educator performed, how often those activities were performed, and how they were perceived by colleagues and administrators. While this detail should inform readers about changes in role, the more complex challenges of identity construction, teachers' views of learning and how they were negotiated, the tools that shaped their discourse and created opportunities for responding to specific challenges in specific classrooms remained unexplored.

Vaughn, Elbaum, and Schumm (1996) looked at how students with learning disabilities fared socially in inclusive classrooms. Students with learning disabilities in grades 2 through 4 were enrolled in a school that was moving to an inclusive school model for the first time. They were in classrooms where teachers had volunteered to serve their students inclusively. Students were assessed in the spring and fall on three measures: (a) peer nominations of liking and non-liking; (b) a measure of self-concept; and (c) loneliness and social dissatisfaction scale. Together, these measures produced seven dimensions that were analyzed from social acceptance to perceptions of academic competence. The results suggested that the students with learning disabilities in the study experienced less social acceptance than their peers who were not identified for disabilities. However, they did not fare any worse than students with learning disabilities in previous studies where social competence was measured for students receiving educational support in resource rooms. Complexities introduced by the ethnicities, backgrounds, socio-economic status, and languages of teachers and students were not addressed in the study. Further, since the only measure of social functioning was sociometric, the voices and perceptions of the students were not present in the study. One interesting perspective on this study is the degree to which learning and social adjustment were perceived as separate constructs.

Conceptually, learning appeared to be a function of academic performance rather than a complex phenomenon that encompasses social, cognitive, cultural, aesthetic, and spatial dimensions.

Another study conducted in the same time frame by Klingner et al. (1998) questioned students with and without learning disabilities about their preferences for services delivered in the general education or resource classroom. In this study, 32 students were interviewed. Questions included such items as (a) what does the LD teacher do; (b) who does she work with; (c) why do you have two teachers in your class; (d) how do you like having two teachers; (e) which do you like best, pull-out or inclusion; (f) which way helps kids learn better; (g) which way helps kids have more friends; (h) what grouping helps you learn best: working alone: with a partner, in a small group, or with the whole class; (i) do you like to teach other students; and do you like it when they teach you? Frequency counts of student responses were catalogued and organized by responses of students with and without disabilities. Researchers found that students with and without disabilities slightly preferred a resource room delivery model. However, the students who preferred it seemed to do so for the opportunities it gave them to (a) do easier work and (b) have a bit of free time on the way to and from class. Students in both categories preferred small group instruction followed by pairs. They also enjoyed being taught by peers for reasons that included knowing one another for a long time and that there was focused time spent on learning. The information from the interviews appeared to be rich and varied but the researchers were cautious in their conclusions particularly with regard to the importance of students' feedback on how schools might organize for instruction:

Should student preference affect placement decisions? We believe that students' views do provide insights into their learning needs and should be considered.

However, their preferences should be just one of many relevant factors considered

when making a placement decision or when evaluating the appropriateness of an ongoing program (Klingner et al., 1998, p. 156).

While students were the focus of this study, the research question—i.e., which do students prefer, pull-out or general class instruction?—seemed to constrain the researchers exploration of the data they collected. Indeed, the approach to reporting results (frequency counts) limited more robust analyses of the data. The researchers offered three student profiles from their study that seemed to represent the kinds of student responses they received. These profiles briefly described the students in terms of their academic proficiencies and then reported their responses to specific questions. Because the questions constrained student responses, ideas that students may have had about how they best learned, how teachers could best help them, and what they needed in order to learn were not explored. While the researchers wanted to know what students thought about a particular practice, they missed perceptions of students about their learning context in general, including what they perceived to be of value to the teachers and how this informed students' participation in specific activities.

The studies reviewed here are representative of a series of studies over the last 15 years that examined how inclusive education affects students and teachers (e.g., Baker, 1995; Dieker, 2001; Klingner, Vaughn, Hughes, Schumm, Elbaum, 1998; Walther-Thomas, 1997). Most of the research questions seem to focus on technical dimensions of practices such as is inclusive education a good practice or how should special and general educators work together? Because the questions were narrowly focused and seemed to have uni-dimensional views of learning as measured by standardized academic and/or cognitive assessments, the research itself provides uni-dimensional responses to the questions posed. Bransford et al. (2000) suggest that the goals for learning impose a kind of architecture for learning that incorporates multidimensional

features such as learner-, knowledge-, assessment-, and community-centered approaches. A learner centered approach to learning would capitalize on what students bring to the learning situation (e.g., personal knowledge, beliefs about content or cultural/linguistic practices) and use those assets to develop shared learning goals. Culturally responsive instruction is an example of learner-centered models. In contrast, inclusive education researchers seem to spend little time on defining learning or what is to be learned. One study provides more information about whether students prefer one kind of instruction or another but very little about the personal and social contexts that influence their perceptions and opinions (e.g., Klingner et al., 1998). Another study focuses on the techniques that lead to including one child in a general education classroom but very little about the institutional, professional, or familial histories that created the context (e.g., Kozleski & Jackson, 1993). Some studies focus on teachers and their responses to dealing with students with disabilities in their classroom (e.g., Giangreco et al, 1993) or how one special educator negotiates new roles (e.g., Klingner & Vaughn, 2002). In these studies, narrow views of learning are informed by narrowing research methods that fail to capitalize on the complex environment of classroom work. The problem in simplifying complex realities is that researchers risk engaging in essentialism that makes teachers the omniscient focus of all classroom activity and makes the role of learner passive and procedural. What classroom research on inclusive practices needs is complex views of learning and the roles that learners play in constructing learning over time.

Instructional Approaches for Content Acquisition

While changes in how teachers organize the curriculum and their instructional practices have been at the heart of classroom research on inclusive practices, why teachers seem unlikely to make these adaptations seems a critical question for creating and sustaining inclusive

classrooms (Boardman, Arguelles, Vaughn, Hughes, & Klingner, 2005). One possible explanation may lie within the assumptions made about teaching and the importance given to technique as the salient variable in good teaching. Behavioral views of human learning and single subject methodologies produced evidence that students with severe intellectual disabilities could learn under carefully controlled situations in which the actions of teachers were critical in prompting, shaping, and reinforcing specific behaviors. However, conceptions of learning as directed and external diluted the possibility that the rich environments of classrooms provided incidental and informal opportunities for observation, participation, and the development of increasingly complex skill sets not anticipated by early researchers. In fact, some of the original tenets of instruction and curriculum, defined by professionals, inhibited opportunities to participate and learn in general education classrooms. Thus, context as a critical feature of opportunities to learn was subordinated to specific procedural knowledge that teachers need to ensure that learning occurs.

Research on special education instructional approaches has focused on particular on the following aspects of knowledge and skill development: (a) assessment for determining learning progress; (b) curriculum based instruction; (c) strategy instruction vs. direct instruction; (d) literacy development vs. direct instruction of reading skills; (e) math skills development; (f) study skills; (g) social and emotional skills learning (such as aggression replacement training); and (h) positive behavior supports (including the functional analysis of behavior, whole school, classroom, and individual student behavioral interventions). Unlike research on instructional organization and delivery, this research focuses on specific procedures for teaching skill development. This research most often takes an experimental approach. Students in experimental and control conditions in which teachers are asked to vary only one or two aspects of their

teaching approach are assessed before and after an intervention. Changes in performance on a measure of academic proficiency are used to measure effects of treatment and control procedures.

Using these inquiry techniques, two approaches to improving academic performance have shown particular promise. The first is strategy instruction. Strategy instruction assumes that students with disabilities fail to learn adequately because they lack the cognitive strategies or mental schemas for organizing themselves to learn. From this perspective, students need to develop skills in identifying what is to be learned, what is to be produced, select an appropriate process for accomplishing the task, manage their focus, attend to the task, self-reflect, and shift performance effort on the basis of the self-reflection. Research on both generic strategies for learning as well as task-specific strategies for learning, such as comprehension strategies, have been shown to improve student performance (Bulgren & Schumaker, 2006). Early research on strategic instruction (e.g., Palinscar & Brown, 1984) drew on sociocultural theorists such as Vygotsky (1978) focusing specifically on aspects of learner self-regulation seemingly omitting other aspects of his work including apprenticeship, modes of discourses, and the notion of a social collective. Englert and Mariage (1996) extended work on strategy instruction to incorporate student participation in communities of learners characterized by a focus on wholistic activities, collaborative problem solving and skill building, and scaffolds meant to bridge knowledge gaps while students build their skills.

A second, well-researched approach to learning is direct instruction in which a specific set of teaching procedures is assembled for teaching a complex skill such as reading. In this approach, students receive direct instruction from a teacher who introduces a subskill by modeling the skill, describing the components of the subskill, having the student practice each

step of the subskill, chaining the elements of the subskill together, practicing the subskill with careful reinforcement from the teacher, and then practicing the skill in novel situations until the student is able to produce the skill without error. Once this occurs, the next subskill is introduced until a set of subskills can be linked together to produce a performance (Swanson, 2001).

Most of the research on strategy and direct instruction has been done in one on one settings and small groups rather than with whole classrooms. Further, where classrooms have served as experimental and control groups as in Fuchs and Fuchs (2005), the focus has been on assessing the results of particular procedures on task attainment as the learning outcome. Bransford et al. (2000) suggest that knowledge centered approaches to learning focus on promoting learners' understanding of a subject (e.g., math, history), not a mere memorization of information. Bransford also stresses the development of learners' metacognition and their ability to transfer such understanding to new situations and tasks. Ultimately, the goal is to support learners' understanding of a discipline's constructs and procedures, or as Greeno (1991) suggests, "learning the landscape" (p. 175) of a discipline. Intersections with learner-centered models are readily apparent since both build on what students bring to the learning environment. Knowledge-centered models have significant implications for the construction of meaningfully integrated curricula in the disciplines. As Bransford et al. (2000) explain, many approaches to curriculum produce disjointed knowledge and skills that lack coherence and a sense of wholeness. While an individual learning objective might be reasonable, it must be seen as part of a larger network since expertise is characterized by knowledge networks, not disconnected knowledge chunks. Within knowledge centered models the challenge becomes developing balanced learning designs that both promote understanding *and* develop skill automaticity. The result is smooth engagement in learning tasks without basic fluency issues. This issue of balance

is crucial for the design of learning environments for students with intellectual, learning, and behavioral disabilities as they struggle to acquire automaticity of literacy and numeracy skills.

While ensuring that the field develops a better understanding of how students can learn specific cognitive strategies to master skill development, classroom research on students with disabilities studies suggest that the prevailing special education paradigm for learning is the development and application of procedural knowledge to specific kinds of problem solving, a technical rather than critical view of what constitutes learning and its end uses. Connections to neo-liberal notions of education for globalization can be drawn. As learning is conceived of sets of increasing complex skill acquisition and application, it suggests that the outcomes of a globalized view of education are also conceptualized as the reproduction of complex sets of skills for a knowledge economy. By focusing on technical knowledge acquisition determined by people and organizations distal to the learning environment, the relationships between teacher and students and among students are not well understood. Their role is crucial developing, practicing, using, and constructing knowledge in less structured situations where opportunities to learn might be advantaged by shared aspirations, supportive relationships between and among students and teachers, a community focus on local complexities, the development of tools for inquiry, and other features of a community linked together in purposeful learning.

Implications: Re-mediating theory and methods with a transformative agenda

Inclusion research has grown significantly in the last 30 years. We argued at the beginning of this article that a historical perspective is critical to understand the development of inclusion research and we hope our brief historical discussion helped contextualize the meaning and development of inclusion in different eras. In addition, we identified several important shortcomings in this literature; we outline the five most visible:

1. Inclusive education theory has outpaced its practice. While the conceptualization of inclusive education has become increasingly sophisticated, the research focus has been on students with disabilities rather than on the complete composition of what is theorized to be an inclusive school.

2. Although inclusive education has been increasingly theorized, conceptual clarity is urgently needed. Since multiple definitions of inclusive education co-exist in this literature, the design and implementation of studies and the accumulation of empirical facts and insights is compromised.

3. Although educational systems are influenced by globalization forces, research on inclusive education seems to ignore this phenomenon. It is not yet clear that globalization will embrace a deterministic perspective. In a world made more fluid by the latest wave of globalization, it is critical that future research on inclusive education makes visible the struggles and transformations that are shaped and defined by globalizing forces.

4. Disparate conceptualizations of learning inform classroom- and school-based inclusion studies. The former tends to have a strong behavioral or cognitive (i.e., psychological) theoretical basis, whilst the latter is grounded in a practice-based (i.e., interdisciplinary) perspective. We discuss below several implications of this situation.

5. The research methods used have not produced thick descriptions of the complexities associated with the development of inclusive education programs. Additional gaps that result from methodological issues include the lack of detailed documentation of change processes and clear implications for the transferability of research findings.

Before we conclude, we reflect on two substantive issues that have significant relevance for future inclusive education research. These issues are the historical and theoretical confusion around learning itself and the links between learning theories and research methods.

Of theoretical stipulations and history in learning theory: A transformative agenda for inclusive education research

As we examined the literature on inclusive education, a somewhat fragmented picture of views of learning emerged. This is not surprising since tensions and contentious debates have always surrounded the evolution of learning theories (Phillips & Soltis, 2004). Nonetheless, it is important to reflect on the ways theoretical stipulations and assumptions about time (history) shape the divergent perspectives of learning in inclusive education research.

We explained at the beginning of the article that learning theories comprise three stipulations, namely a telos (the direction of movement of learning), subject-world relation, and learning mechanisms (Lave, 1996). Our review suggests the views of learning in classroom-based studies rely on different theoretical stipulations from the school-based work. The telos in classroom-based research seems to be the acquisition of basic literacy and behavioral knowledge and skills. This work aims to equip students with disabilities with thinking and acting strategies and skills to engage effectively in mainstream tasks and activities. Implicit in this perspective is the assumption that reality lies in the world and thus, subjects must acquire the sanctioned tools to know it.

In turn, school-based research is purportedly grounded in a practice-based model of learning. Consequently, the telos is to become competent members of communities (i.e., schools) in which *all* students (i.e., students with disabilities) participate and achieve. The subject-world relation in school-based research is concerned with how inclusive schools are socially constituted

through inclusive practices. In this model, learning is theorized as participation and its evolution. Nevertheless, as we indicated above, the bulk of the evidence on learning addresses participating teachers with a preponderance of self-reported data on change. Interestingly, the evidence on student learning is purportedly grounded in more traditional indices like the ones used in classroom-based research (e.g., achievement scores).

Time is a key dimension in the study of learning. Indeed, investigators need to trace the history of learning in order to assess changes. Scribner (1997) built on Vygotsky's work by exploring the ways in which history enters learning and developmental processes. She explained learning processes can be traced along a micro-genetic time scale to gauge the history of moment-to-moment processes. The next time scale is called ontogenetic and it allows us to examine learning processes along the life history of an individual or during stages in biographical trajectories. Special education and developmental psychology researchers have favored this time scale. Above this time line is the cultural historical scale, which accounts for the history of groups, communities, or institutions.

Classroom based research has relied on an ontogenetic time scale to carry out studies. Although few studies report longitudinal analyses of learners' trajectories, this research has documented learning within specified ontogenetic time periods. In contrast, school-based inquiries tend to focus on the cultural historical scale through the documentation of change processes for the entire school community (Artiles, 2003). It should be noted that perhaps the most powerful analytical models combine at least two time scales (Lemke, 2000). This means that future inclusive education research could examine the local instantiation of learning processes in classroom groups (micro-genetic analyses) while changes in the ontogenetic trajectories of subgroups of learners are tracked over time. For instance, this kind of study could

address questions like, how do immigrant students in inclusive schools develop biliteracy while working in multilingual small groups? How do face-to-face and remote access to multiple linguistic communities (in the U.S. and abroad) mediate the emergence of biliteracy for immigrant students in inclusive classrooms in the early primary grades? Similarly, changes in teacher (and/or student) participation structures of inclusive schools could be investigated (cultural historical analyses) and combined with the study of the learning trajectories of individual or distinct groups of students. Possible research questions would include, how do the evolving discussion and problem solving among school personnel of racial discrimination in behavioral support practices mediate the social and academic performance of various racial groups of students?

These are highly consequential and timely questions for students and teachers living in the globalization age. These questions suggest that one of the most important challenges for inclusive education researchers is the need to recognize the role power plays in schools and teacher and student lives. Although inclusive education analysts have been concerned about the exclusion of students with disabilities, there is little attention paid in this work to issues of power (Artiles, 2003). For instance, considering that racial minority and poor students comprise the majority in special education programs in many regions of the U.S., how do race and social class mediate inclusion work? Is inclusion defined differently in programs that serve racial minority students? Why are racial minority students with disabilities placed in more segregated programs than their white counterparts? How are equity concerns for racial minority students addressed in inclusive education programs? This literature is surprisingly silent about this issue (Artiles, 2003). This is unfortunate, particularly for the work done from a whole school perspective because the practice-based theory that informs this research is clearly mindful of these issues. As

Lave (1996) explains, “racialization, gender-, social class-, and sexual-orientation making are aspects of American adulthood that kids are deeply engaged in constituting among themselves. Like the tailors’ apprentices in Liberia they are learning in practice the salient social divisions and identities of the social formation in which they live their lives” (Lave, 1996, p. 159). Indeed, the stratification of American society is created and reproduced in schools every day and globalization is complicating these processes while it threatens to deepen longstanding structural inequities (Burbules & Torres, 2000). Critical questions that come to mind include, how is inclusive education contributing to the preparation of racial minority students with disabilities for technologically rich work environments? Is inclusive education enabling immigrant students to learn these new skills? Do groups of students in special education have differential access to the technological and literacy resources demanded by globalization changes? How do the unique struggles and tensions lived by immigrant students mediate the work done to build inclusive classroom and schools? How do inclusion interventions to equip students with disabilities with certain types of skills take into account historical legacies of discrimination and limited access to learning experienced by girls and low-income students? An important challenge for future research is to understand how inclusive “schools *in particular ways*, ways not identical with the xenophobia, racism, sexism, and homophobia structuring other social institutions, make the learning of these divisions in practice ubiquitous” (Lave, 1996, p. 162).

As we imbue inclusion research with a critical lens to address power issues that affect school routines and people’s lives, we are compelled to ask, “inclusion into what?” (Erickson, 1996). In other words, to what extent do inclusive education advocates question the very nature of the mainstream into which we aim to include students with disabilities and its concomitant inequitable conditions? What counts as community in these contexts and to what extent do we

need to re-imagine the communities from which students from marginalized groups come from? (Gutierrez & Arzubiaga, in press) This adds another layer in the definition of future inclusive education work, namely an attention to equity and social justice. Although we see attention to these issues in the justification for inclusive models (i.e., exclusion from mainstream practices and institutions), it is imperative to problematize what it means to be included and the nature of spaces in which students will be included (Artiles, Harris-Murri, & Rostenberg, 2006). Otherwise, inclusive education might just become a push for assimilation, particularly for those students who have been historically marginalized, and who constitute the majority in many special education programs around the nation (Artiles, Trent, & Palmer, 2004).

Re-mediating theory and methods

We learned inclusive education research is informed by diverse theoretical paradigms and methods. In a way, it is useful to build a knowledge base with multiple perspectives, though the risk is that, unless deliberate efforts are made to build cohesion and pursue programmatic efforts, conceptual confusion and dispersion of findings might occur. One potential problem we found in the literature is the lack of cross-fertilization between the classroom- and school-based inclusion research. Even if these inquiry strands use different views of learning, we see the potential for enriching this emerging knowledge base. It will be important to pursue programs of research at the classroom and school levels within the same theoretical paradigms; at the same time, it is crucial to define overarching questions for a program of research that draws from the various theoretical paradigms represented in this literature.

Moreover, we underlined in the preceding section the need to coordinate various time scales that can be used to study inclusive education and the significant need to infuse a critical perspective to acknowledge power issues. We argue researchers mediate their work (i.e., regulate

their decisions and practices) through theories and research methods (Cole & Griffin, 1983). We discussed how researchers mediate inclusive education work at the classroom and school levels. We noted the strengths and limits of these efforts. One key missing piece in most of this work is a systematic understanding of the role of culture in learning. In a sense, what we need is to *re-mediate* researchers' work as they design and carry out future inclusion research. "Re-mediation means a *shift in the way that mediating devices regulate coordination with the environment*" (Cole & Griffin, 1983, p. 69) (emphasis in original). There have been systematic efforts implemented, particularly in the last 30 years, to re-mediate an understanding of human development and its associated constructs (e.g., learning) as cultural phenomena (Cole, 1996; Rogoff, 2003). Therefore, a central challenge for future inclusive education research is to re-mediate the design and implementation of inclusive educational environments with theories that offer a systematic understanding of the cultural and political nature of learning (Arzubiaga, Artiles, King, Harris-Murri, 2006).

The strength of community centered models is that it relies on a practice-based model of learning, which as we explained, it takes into account the role of culture. However, it will be important to develop multidimensional inclusive models that incorporate attention to learner-, assessment, and content-centered models (Bransford et al., 2000). The unit of analysis in the new wave of inclusion research will have to transcend the individual and focus on individuals-acting-in-activity-systems (Gutierrez & Rogoff, 2003). This will open new and exciting possibilities to understanding the processes and outcomes of inclusion from an inter-contextual angle; that is, researchers will examine inclusion related questions across schools, communities, and home. An important implication of the re-mediation of inclusive education research with culturally based learning paradigms is that learning will not be construed solely as an outcome like in the current

literature. As we noted above, practice-based views of learning emphasize the transformation of identities over time as a key indicator of learning. From this perspective, learning is construed as becoming new kinds of persons (Lave & Wenger, 1991). This means that the *process is the product* (Wertsch, 1985), and thus the next wave of inclusive education research must transcend the documentation of outcomes as the only legitimate proof of impact.

Conclusion

An analysis of views of learning in inclusive education requires understanding of the changing nature of education, the transforming communities served by schools, and the rapid economic and technological changes underway at a global scale. Inclusive education cannot afford to ignore the demographic imperative of the new millennium. Because a sizable proportion of students have been historically marginalized, social justice must be a focal consideration of any inclusive program. By missing the opportunity to engage and document how the politics of inclusive schools affect and interact with the construction of participation, inclusive education research runs the risk of simplifying and/or romanticizing a complex construct that has emancipatory potential. Inclusive education, in a time of globalization, has the potential to offer places for teachers and students to explore their own, individual and collective, identities as learners. By doing so, the opportunities to cross the boundaries of location, voice, knowledge, and learning are vast. This potential is the best of what a rapidly flattening world can offer. But such a process requires the use of carefully considered definitions of what is being studied, nuanced ways of collecting and interpreting the data, and ongoing discourse within communities to purposefully explore and understand the nature of what an inclusive education can be.

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